



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
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नई दिल्ली, शनिवार, जुलाई 13, 1991 (आषाढ़ 22, 1913)  
NEW DELHI, SATURDAY, JULY 13, 1991 (ASADHA 22, 1913)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

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Calcutta, the 13th July, 1991

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Bombay-400 013.

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Unit No. 401 to 405, III Floor,  
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Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

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पेटेंट कार्यालय  
एकस्य तथा अभिकल्प  
कलकत्ता, दिनांक 12 जुलाई 1991

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जिन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोली इस्टेट,  
लौखरा तल, लोखर परेला (पश्चिम),  
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोवा, दमन तथा दिव एवं दाररा और नगर द्वितीय।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,  
इकाई से 401 से 405, लौखरा तल,  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,  
61, वालाबाद रोड,  
मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप, मिनिर्काय तथा एमिनिर्बिधि द्वीप।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय,  
मकान 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—“पेटेंटोफिस”

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की सुदायी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को सुगतान योग्य बनावेश अथवा डाक आवेश या जहां उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को सुगतान योग्य बैंक ड्राफ्ट अथवा बैंक द्वारा की जा सकती हैं।

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed under Section 135, of the Patents Act 1970.

The 3rd June, 1991

414/Cal/91 Isover Saint Gobain. Mineral fibres which can decompose in a physiological medium.

415/Cal/91 Siemens Aktiengesellschaft. Vent steam condenser arrangement.

416/Cal/91 Siemens Aktiengesellschaft. Method for testing arrangements.

417/Cal/91 Ferguson Limited. Circuit for alternately connecting one of several data lines to a common data read line. (Convention dated June 30, 1990; No. 9014608.5; U.K.).

418/Cal/91 Alpa Spa. Acrylic copolymer useful in the hide tanning and process for the preparation thereof.

The 4th June, 1991

419/Cal/91 Philips Petroleum Company. Method of recovering poly (Arylene sulfide) polymers.

420/Cal/91 General Electric Company. Premixed secondary fuel nozzle with integral swirler.

421/Cal/91 Asta Pharma Aktiengesellschaft. A process for the preparation of an agent with the active substance flupirtine to combat muscular tension and the use of flupirtine for such purpose.

422/Cal/91 Samsung Electron Devices Co. Ltd. Deflection yoke.

423/Cal/91 Beloit Corporation. Pressurized Dynamic washer.

The 5th June, 1991

424/Cal/91 Hitachi Ltd. Gas filling circuit breaker.

425/Cal/91 Deutsche Engineering Der Voest-Alpine Industrieanlagenbau GmbH. Process and apparatus for the production of synthetic yarns or fibres from polymers, more particularly polyamide, polyester or polypropylene.

426/Cal/91 The Ferrous wheel Group, Inc. High performance high strength low alloy steel.

The 6th June, 1991

427/Cal/91 Thomson Consumer Electronics, Inc. Wide screen television.

428/Cal/91 BTR Plc. Plug valve. (Convention dated 8th June, 1990; No. 9012798.6; Great Britain).

429/Cal/91 E.I. Du Pont De Nemours and Company. Stripping method for removing resist from a printed circuit board.

430/Cal/91 Indian Aluminium Company. Process for the production of reactive type alumina.

The 7th June, 1991

431/Cal/91 M + S Brugg Ag. Sheet straightening machine.

432/Cal/91 Abb Lummus Crest Inc. Transalkylation in the presence of a catalyst slurry.

433/Cal/91 Samsung Electronics Co. Ltd. Motion signal processor.

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, THIRD FLOOR, KAROL BAGH, NEW DELHI-5

The 15th April, 1991

320/Del/91 Gomaco India Pvt. Ltd. "A paver and trimmer".

321/Del/91 The Procter & Gamble Co., "Hair styling shampoos".

322/Del/91 The Procter & Gamble Co., "Hair styling conditioners".

323/Del/91 The Procter & Gamble Co., "Hair styling compositions".

324/Del/91 Alcan International Ltd., "A method for producing an improved welded structure". (Convention date 24th February, 87) (U.K.) & [Divisional date 23-2-1988].

325/Del/91 Gec Alsthom S.A., "A medium tension circuit breaker".

326/Del/91 Gec Alsthom S.A., "A medium or high tension circuit breaker having abutting arcing contacts".

327/Del/91 Compagnie Française D' Etudes Et De Construction Technip, "Improvements in or relating to pressurized, tubular, catalytic converter for hydrocarbons".

The 16th April, 1991

328/Del/91 Kabushiki Kaisha Toshiba, "2 D of controller".

329/Del/91 The Secretary, Department of Science and Technology "A myoelectric hand".

330/Del/91 Telefonica De Espana, S.A., "Modular public telephones management system".

331/Del/91 Chemical Research & Licensing Co., "Catalytic distillation structure".

332/Del/91 Caoutchouc Manufacture Et Plastiques, "A transmission member for a continuous variable transmission".

333/Del/91 Caoutchouc Manufacture Et Plastiques, "A flexible power transmission connection".

334/Del/91 Eastman Kodak Co., "Solid-form additive systems dispersible in aqueous media, methods for the preparation and application thereof to polymeric particles".

335/Del/91 Dr. Beck & Co. Aktiengesellschaft, "Temperature and solvent-resistant ink for the jet printing process".

The 18th April, 1991

336/Del/91 Kabushiki Kaisha Dairiseki Kohgeisha, "Joint structure for fixing panel blocks on side wall of the building".

337/Del/91 Gursaran Singh (Rtd.), "A technique to increase thrust in jet engines and to reduce noise of engine and increase propulsive efficiency and to recover losses from exhausting gases, all in a jet engine for aircraft".

338/Del/91 PPG Industries, Inc., "Sputtered titanium oxynitride films". [Divisional date 17th March, 1988].

339/Del/91 Motorola Inc., "Satellite signalling system having a signal beam with a variable beam area".

The 19th April 1991

340/Del/91 Fosroc International Ltd., "A method of anchoring an anchor element in a borehole". [Divisional date 6th December, 1988].

341/Del/91 Fosroc International Ltd., "A method of forming a set composition". [Divisional date 6th December 1988].

342/Del/91 2C Corp., "Dual writing element retractable pen".

343/Del/91 GPT Ltd., "Call processing". (Convention date 24th April 1990) (U.K.).

344/Del/91 The B.F. Goodrich Co., "A process for producing a thermoflexible synthetic resinous sheet". [Divisional date 29th February, 1988].

345/Del/91 Hydro Energy Associates Ltd., "Hydro-electric power conversion system". (Convention date 27th April, 1990 & 3rd October, 90) (U.K.).

346/Del/91 Nadeem Electronics (Pvt. Ltd.), "Alignment free colour television set with voltage synthesized electronic tuning system".

347/Del/91 El-Sew-Con Ltd. "Electronic tension control systems in sewing machines". (Convention date 21st April, 90) (U.K.).

22nd April, 1991

348/Del/91 AB SKF, "Rolling bearing".

349/Del/91 CPC International Inc., "A co-hydrolytic process for the production of novel extracts from yeast and non-yeast proteins". (Convention date 21st April, 90) (U.K.).

350/Del/91 The Research & development Institute Inc., "New polymer products and methods for their production".

351/Del/91 C. R. Bard, Inc., "Multi-layer high strength balloon for dilatation catheter".

23rd April, 1991

- 352/Del/91 The Procter & Gamble Co., "Dispensing package for viscous and semi-solid products".
- 353/Del/91 UOP, "Integrated adsorption process for hydrogen and hydrocarbon recovery using temperature swing step in front of pressure swing step".
- 354/Del/91 The Northern Territory of Australia, "A seat form". [Divisional date 4th April, 1988].
- 355/Del/91 James Arthur Albert Hickman, "Method of laminating glass". (Convention date 23rd April, 1990) (U.K.).
- 356/Del/91 Poclain Hydraulics, "Pressurized-fluid mechanism, such as a hydraulic motor or pump, having several operational cylinder capacities".
- 357/Del/91 Stein Industrie, "Apparatus for reacting a gas and a particulate material in an enclosure".
- 358/Del/91 Armco Inc., "Apparatus and method for automatically aligning a welding device for butt welding work-pieces".

24th April, 1991

- 359/Del/91 Courtaulds Films & Packaging (Holdings) Ltd, "Packaging materials". (Convention date 1st May, 90) (U.K.).
- 360/Del/91 W.R. Grace & Co-Conn. "Photocurable elements and flexographic printing plates prepared therefrom".
- 361/Del/91 Russell D. Ide, "Hydrodynamic bearings having beam mounted bearing pads and sealed bearing assemblies including the same".
- 362/Del/91 Gec Alsthom S.A., "A circuit breaker with an incorporated varistor".
- 363/Del/91 Russel D. Ide, "Hydrodynamic bearings having a continuous beam mounted support surface".

25th April, 1991

- 364/Del/91 Riker Laboratories, Inc., "Device".

26th April, 1991

- 365/Del/91 Council of Scientific & Industrial Research, "An improved wick raising and lowering mechanism for liquid fuel burning wick appliances".
- 366/Del/91 Council of Scientific & Industrial Research, "A process for the preparation of siliceous adsorbent from kimerlite waste mineral".
- 367/Del/91 Council of Scientific & Industrial Research, "A process for the preparation of keratin hydrolysate (KH) from keratinous wastes for use as a leather filter-cum-retanning agent".

- 368/Del/91 Council of Scientific & Industrial Research, "A process for the preparation of a pharmaceutical composition with enhanced activity for the treatment of vitiligo, psoriasis, mycosis and fungoides".
- 369/Del/91 Council of Scientific & Industrial Research, "An improved process for the preparation of precipitated silica from soluble silicates".
- 370/Del/91 Council of Scientific & Industrial Research, "An improved electrolysis cell for the removal of bod/cod of waste waters".
- 371/Del/91 Council of Scientific & Industrial Research, "A process for the utilisation of Indian ocean manganese nodules as a catalyst".
- 372/Del/91 Council of Scientific & Industrial Research, "A process for the preparation of platinum-on-alumina catalyst, useful for the catalytic reforming of gasoline".
- 373/Del/91 Ahmad Sayeed & Others, "Knob of piano type electric switch which glitters in darkness".
- 374/Del/91 Isher Singh Gill, "Improvement in tobacco smoking pipe and the like".

- 375/Del/91 Gorachand Ghosh, "Universal optical fibre adaptor and detector".
- 376/Del/91 Ghanashyam Shankar Tagaonkar, "A cooling system".
- 377/Del/91 Applications Mecaniques Et Robinetterie Industrielle (A.M.R.I.), "A process for improving the mechanical and sealing properties of elastomer gaskets and gaskets obtained using this process".
- 378/Del/91 Rohm & Haas Co., "Composition and method for controlling cholesterol".

29th April, 1991

- 379/Del/91 Luigi Stoppani S.p.A., "A process and plant for the preparation of alkaline chromates from chromium minerals".
- 380/Del/91 B. F. Goodrich Co., "A stable organic composition [Divisional date 5th February, 1988].

30th April, 1991

- 381/Del/91 Thomas C. Edwards, "Rotary vane machine with simplified anti-friction positive bi-axial vane motion control".
- 382/Del/91 Societe De Conseils De Recherches Et D' Applications Scientifiques (S.C.R.A.S.), "A method for the preparation in a non-Racemic form of furd (3, 4-c) pyridine derivatives".
- 383/Del/91 Colas Roads Ltd, "Applicator for applying a surface treatment".

384/Del/91 Motorola Inc, "Satellite communications system".

7th May, 1991

1st May, 1991

385/Del/91 The Procter &amp; Gamble Co., "Sanitary napkin having improved flap disposition and means for maintaining the flaps therein".

386/Del/91 The Procter &amp; Gamble Co., "Clean conditioning compositions for hair".

387/Del/91 Harjinder S. Cheema, "A dry soil brick moulding machine".

388/Del/91 Kali-Chemie AG., "Process for the working-up of waste materials from barium sulphide leaching or strontium sulphide leaching".

389/Del/91 Charles Bernard Haassenboehler, "Nonwoven filter and method of manufacture".

390/Del/91 BP Chemicals Ltd, "Process for the production of 2, 3-dimethylbutene-1 from propene". (Convention date 23rd April, 87) (U.K.) &amp; [Divisional date 21st April, 1988].

2nd May, 1991

391/Del/91 John Mark Tucker &amp; Other, "A method of making a device for the transdermal administration of a physiologically active substance". [Divisional date 23rd February, 89] &amp; (Convention date 23-2-88) (U.K.).

392/Del/91 John Mark Tucker, "A method of making a device for the transdermal administration of a physiologically active substance". [Divisional date 23rd February, 89] &amp; (Convention date 23rd February, 88) (U.K.).

3rd May, 1991

393/Del/91 Domino Printing Sciences PLC, "Ink supply system for continuous ink jet printer". (Convention date 3rd May, 90) (U.K.).

6th May, 1991

394/Del/91 Alitech Pvt. Ltd, "Compacting device".

395/Del/91 Raj Kumar Gupta, "Improvements in electrically operated lamps and related fittings".

396/Del/91 Council of Scientific &amp; Industrial Research, "A process for the preparation of 3-(4'-methoxy phenyl)-isopropyl glycidic ester useful as drug intermediate".

397/Del/91 Council of Scientific &amp; Industrial Research, "A process for the preparation of sorbent extrudes useful for high temperature desulphurisation of coal burning gases".

398/Del/91 Council of Scientific &amp; Industrial Research, An improved process for the simultaneous separation of cyclohexanone oxime and cyclohexanone azine using phenyl methyl silicone and diatomaceous earth".

399/Del/91 Unes A/S., "An apparatus for preparing a concentrate of coagulation factors, such fibrinogen, from a blood sample".

400/Del/91 Jitendra Behari, "Microwave radiation monitor".

401/Del/91 Lubrizol Genetics Inc, &amp; Other, "A recombinant promoter for gene expression in monocotyledonous plants".

402/Del/91 Director, Forest Research Institute, "A wood preservative".

403/Del/91 Americal Colloid Co., "A Method of Manufacturing a liquid plant stimulant". [Divisional date 2nd March, 1988].

404/Del/91 Pfizer Inc., "Azabenzimidazoles in the treatment of asthma, arthritides and related diseases".

405/Del/91 Scientific Design Co. Inc., "Improved phosphorous/vanadium oxidation catalyst".

8th May, 1991

406/Del/91 Westinghouse Brake and Signal Holdings Ltd., "Slack adjuster mechanisms". (Convention date 10th May, 90 &amp; 29th May, 90) (U.K.).

9th May, 1991

407/Del/91 Imperial Chemical Industries PLC, "Combustion apparatus". (Convention date 13th April, 87) (U.K.) &amp; [Divisional date 5th April, 1987].

10th May, 1991

408/Del/91 Ranbaxy Laboratories Ltd, "Process for the preparation of 3-exomethylene cephalosporins".

409/Del/91 Bharat Heavy Electricals Ltd, "Zero-leak rotary expander".

## APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH AT TODI ESTATES, 3RD FLOOR, SUM MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-13

1st May, 1991

118/Bom/91 Pestonji Narimonji Contractor "Power transmission differential gear devise for 3 to multi wheelers Auto Vehicles".

2nd May, 1991

119/Bom/91 C.A. Joseph &amp; K.C.K.A. Gupta "A Toy Bird".

120/Bom/91 Bradma of India Ltd. "Oscilloforge cold forging process and related equipment for making marking type punches".

121/Bom/91 Vasantdada Sugar Institute "A process and the plant thereof for treatment of spentwash to accomplish zero pollution alongwith generation of Energy".

3rd May, 1991

122/Bom/91 Hindustan Lever Limited "Coal dewatering".

8th May 1990 Australia

123/Bom/91 Intech Exports Private Limited "Improved powder recovery means in powder coating booth".

## APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002

11th March, 1991

200/Maa/91 Puli Ramachandraiah Devendra Rao. Circular Antenna (Circular Antenna for vertical band signal reception).

201/Maa/91 Maschinenfabrik Rieter Ag. Device for guiding fibre material.

202/Maa/91 Maschinenfabrik Rieter AG. A textile machine, in particular a ring spinning machine.

203/Maa/91 Takemoto Yushi Kabushiki Kaisha. Method of separating sesamin Analogues.

12th March, 1991

204/Maa/91 Liquid Carbonic Corporation. Liquid carbon dioxide injection in exothermic chemical reactions.

205/Maa/91 CTB INC. Grain drying system.

206/Maa/91 Indian Space Research Organisation. A process of integral black anodizing on magnesium alloys.

207/Maa/91 Indian Space Research Organisation. A process of gold plating on titanium alloys.

13th March, 1991

208/Maa/91 S. Sathali. Efficient flywheel.

209/Maa/91 Ullal Kamalakshe Mallys. A process for the manufacture of a novel toilet soap.

210/Maa/91 Minnesota Mining and Manufacturing Company. Process for applying a release coating to a wet non-woven backing.

211/Maa/91 Rhone-Poulenc Chimie. Process for preparing a shaped sheet metal product. (Divisional to Patent Application No. 409/Maa/87).

14th March, 1991.

212/Maa/91 Alex Horng. A non-brush D C Motor with a new improved stator.

213/Maa/91 Uponor N.V. Improvement in a sewage.

214/Maa/91 Maschinenfabrik Rieter AG. Spinning machine, in particular, a ring spinning machine.

15th March, 1991

215/Maa/91 Carborundum Universal Ltd. Abrasive grinding wheels.

216/Maa/91 Daikin Industries Ltd., Process for preparing 1, 1, 1-trifluorochloroethane and 1, 1, 1, 2-tetrafluoroethane.

18th March, 1991

217/Maa/91 Pavuluri Rama Lakshmana Rao. Circuit for automatic automobile head lamp dipping and driver alerting.

218/Maa/91 V. Ganeshan. Pulse Producer for quartz clock and time piece.

219/Maa/91 Sumeet Research &amp; Holdings Ltd. A grinding jar for mixer/grinder.

220/Maa/91 The Dow Chemical Company and Allied-Signal Inc. A process for preparing a copolymer composition. (Divisional to Patent application No. 585/Maa/87).

221/Maa/91 Gerard Kessels. A process for the preparation of D—(—)—4—Hydroxyphenylglycine and L—(+)—4—Hydroxyphenylglycine, starting from D.L.—4—Hydroxyphenylglycine.

19th March, 1991

222/Maa/91 T.G. Chandrasekaran. Anti-crank method or cable chain drive.

223/Maa/91 George Zachariah. Self rotating electricity generators, propulsion of automobiles by magnetic repulsion.

224/Maa/91 Shell Internationale Research Maatschappij B.V. Polymer compositions. (March 21, 1990; Great Britain).

225/Maa/91 Gaztech Corporation. Simple fire detector.

226/Maa/91 Minnesota Mining and Manufacturing Company. Able-top container and method and apparatus for construction thereof.

20th March, 1991

227/Maa/91 Girivas Viswanath Shet. A method of preparing nutmeg in sandal in oleoresin form as a home remedy for children.

228/Maa/91 R. Sundar Rajan. Electric static dynamo.

229/Maa/91 Thirumalai Anandampillai Vijayan. An improved floor cleaner.

230/Maa/91 Flo-Con Systems, Inc., Sliding gate three plate non-reversible system, valve, refractories and method.

21st March, 1991

## PRINTED SPECIFICATION CHALLAN

231/Mas/91 Dinesh Vrajil Modi. A protective sheath for electric conductors.

232/Mas/91 Dr. P.K. Sasikumar. Kera-care.

233/Mas/91 V. Balagurusamy. Auto Power Producer.

234/Mas/91 Epilady International Inc. Hair grooming device.

235/Mas/91 Monsanto Company. Electrolessly deposited metal holograms.

236/Mas/91 Maschinenfabrik Rieter AG. Method of controlling machines for cleaning of fibers.

237/Mas/91 Natural Environment Research Council. Method of constructing an expression vector. (August 12, 1987; Great Britain); (Divisional to Patent Application No. 581/Mas/88).

238/Mas/91 Natural Environment Research council. (August 12, 1987; Great Britain) (Divisional to Patent Application No. 581/Mas/88) Process for Producing Polypeptide.

22nd March, 1991

239/Mas/91 Montedipe Srl and Enichem SpA. Supported catalyst for the polymerization and copolymerization of olefinically unsaturated compounds, and a (CO) polymerization process which uses it.

240/Mas/91 Fosroc International Limited. Anchor element to be anchored in a borehole (December 30, 1986; Great Britain) (Divisional to Patent Application No. 912/Mas/87).

241/Mas/91 Igen, Inc. Catalytic antibody components.

## ALTERATION OF DATE UNDER SEC. 16

168919 : Ante-dated to May 05, 1986.  
(165/Cal/89)

168920 : Ante-dated to July 17, 1987.  
(830/Cal/90)

168930 : Ante-dated to May 28, 1986.  
(676/Cal/88)

## OPPOSITION PROCEEDINGS

An opposition has been entered by M/s. Bajaj Auto Limited to the grant of a patent on application No. 167752 (596/Del/86) dated 9-7-86 made by PIAGGIO & C.S.P.A.

An Opposition has been entered by the English Electric Company of India Limited, Madras on Application No. 167674 made by Mitsubishi Denki Kabushiki Kaisha, Japan.

A limited number of Printed Copies of the under noted specifications are available for sale from the PATENT OFFICE, CALCUTTA and its three Branches at Bombay, Madras and Delhi at Rs. 2/- (Rupees two only) per copy.

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158364 158365 158366 158367 158368 158369 158370 158371 158372  
158373 158374 158375 158376 158377 158378 158379 158380 158381  
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DEL— 6

MAS—11

BOM— 3

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 167265 167268.

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#### Name & Application No.

##### CALCUTTA

(99/Cal/91 to 187/Cal/91)

##### —A—

Aluminium Pechiney.—170/Cal/91.

American Telephone & Telegraph Co.—184/Cal/91.

Atochem North America, Inc.—115/Cal/91.

##### —B—

Bandyopadhyay D.—157/Cal/91.

##### —C—

C.R. Bard, Inc.—177/Cal/91.

Communications Satellite Corporation.—110/Cal/91.

##### —D—

Daikin Industries, Ltd.—176/Cal/91.

Degussa Ag.—104/Cal/91 and 158/Cal/91.

De La Rue Giori S.A.—130/Cal/91.

#### Name & Application No.

##### D—Contd.

Deutsche Thomson-Brandt GmbH.—114/Cal/91.

Digital Equipment Corporation.—131/Cal/91.

##### —E—

E.I. Du Pont De Nemours and Company.—136/Cal/91, 145/Cal/91, 146/Cal/91, 149/Cal/91, 150/Cal/91, 169/Cal/91, 178/Cal/91, 179/Cal/91, 180/Cal/91.

Elitex Cerveny Kostelec.—162/Cal/91.

Engelhard Corporation.—161/Cal/91.

##### —F—

Felten & Guillaume Fabrik Elektrischer Apparate Aktiengesellschaft.—144/Cal/91.

Fisher Camuto Corporation.—107/Cal/91.

Flamagas S.A.—132/Cal/91.

Fort Gloster Industries Ltd.—112/Cal/91.

##### —G—

G.K. Plastics Pvt. Ltd.—120/Cal/91.

General Electric Company.—122/Cal/91, 123/Cal/91, 124/Cal/91, 125/Cal/91 & 159/Cal/91.

Ghose P.K.—100/Cal/91.

Giorgini Maggi S.r.L.—164/Cal/91.

Godkhindi M.M. (Dr.).—165/Cal/91.

Golden Valley Microwave Foods, Inc.—127/Cal/91.

Gupta S. (Sri).—141/Cal/91.

##### —H—

Hitachi Construction Machinery Co. Ltd.—128/Cal/91 & 172/Cal/91.

Hitachi Ltd.—181/Cal/91.

Hilmont Incorporated.—108/Cal/91 & 175/Cal/91.

Hoechst Aktiengesellschaft.—102/Cal/91, 117/Cal/91, 118/Cal/91, 119/Cal/91 & 147/Cal/91.

Hoechst Celanese Corporation.—138/Cal/91, 151/Cal/91 & 152/Cal/91.

Hoeganaes Corporation.—109/Cal/91.

Hoesch Maschinenfabrik Deutschland Ag.—155/Cal/91.

Hybrood Pty. Ltd.—99/Cal/91.

Hy Kramer.—126/Cal/91.



Name & Application No.	Name & Application No.
—I—	—T—
ICI India Ltd.—137/Cal/91.	Taito Co. Ltd.—133/Cal/91.
Industrial Química Del Nalon S.A.—173/Cal/91.	Technion Research & Development Foundation Ltd.—143/Cal/91.
Instituto Poligrafico e Zecca dello stato and verres S.p.A.—160/Cal/91.	Texaco Development Corporation.—101/Cal/91.
—J—	Trutzschler GmbH & Co. Kg.—103/Cal/91.
Johnson & Johnson Inc.—182/Cal/91.	—V—
Johnson & Johnson Medical, Inc.—183/Cal/91.	Vista Chemical Co.—153/Cal/91.
—K—	
KSB Aktiengesellschaft.—121/Cal/91.	BOMBAY
Krishnarao R.V. (Sri).—165/Cal/91, 166/Cal/91, 167/Cal/91 & 168/Cal/91.	(36/Bom/91 to 58/Bom/91)
—L—	—B—
Leningradskoe Proizvodstvennoe Elektromashinostroitelnoe Obiedinenie "Elektrosila" Imeni S.M. Kirova.—142/Cal/91.	Bajaj Auto Ltd.—55/Bom/91.
Levcon Controls Pvt. Ltd.—141/Cal/91.	Bharati I.K.—50/Bom/91 & 51/Bom/91.
Licentia Patent-Verwaltungs-GmbH.—134/Cal/91.	Bhatia K.B.—46/Bom/91.
—M—	Bhagate, R.—48/Bom/91 & 49/Bom/91.
Massey-Ferguson Services N.V.—185/Cal/91.	—G—
Mitutoyo Corporation.—187/Cal/91.	Gajera G.N.—36/Bom/91.
Mukanda P.G.L (Prof).—165/Cal/91.	Gajera M.B.—37/Bom/91.
—N—	Gajera N.K.—37/Bom/91.
Naue-Fasertechnik GmbH & Co. Kg.—148/Cal/91.	Gajera R.N.—36/Bom/91.
Nitto Chemical Industry Co. Ltd.—174/Cal/91.	Gajera T.V.—37/Bom/91.
Norsolor.—163/Cal/91.	Gajera V.N.—36/Bom/91.
—O—	—H—
Oriasa Cement Ltd.—111/Cal/91.	Hindustan Lever Ltd.—41/Bom/91 & 42/Bom/91.
—P—	Hoechst India Ltd.—57/Bom/91.
Phillips Petroleum Company.—186/Cal/91.	—I—
—R—	Indian Oil Corporation, Ltd.—39/Bom/91.
Roy S. (Sri).—129/Cal/91.	Irani Z.J.—56/Bom/91.
—S—	—K—
S.M.C. Melchior Technologie.—171/Cal/91.	Kamde V.—40/Bom/91.
Samsung Electron Devices, Co. Ltd.—105/Cal/91, 106/Cal/91 & 140/Cal/91.	Kuracina T.C.—47/Bom/91.
Samsung Electronics Co. Ltd.—113/Cal/91.	—L—
Satyajit Engineering Industries Pvt. Ltd. (M/s).—156/Cal/91.	Lunia S.—52/Bom/91 & 53/Bom/91.
Sensyri Ag.—139/Cal/91.	—M—
Siemens Aktiengesellschaft.—116/Cal/91 & 135/Cal/91.	Mankad N.V.—43/Bom/91.
2—G—147 GI/91	Mody H.—54/Bom/91.

## Name &amp; Application No.

—F—

—N—

FMC Corporation.—142/Maa/91.

New Brand S.A.—44/Bom/91.

Fives-Cail Babcock.—158/Maa/91.

—P—

Fosco International Ltd.—109/Maa/91.

Patel G.B.N.—36/Bom/91 &amp; 37/Bom/91.

—G—

—S—

George Washington University, The.—122/Maa/91.

Sapre A.S.—58/Bom/91.

—H—

Sensitive Industries (M/s).—38/Bom/91.

Haldor Topsøe A/S.—72/Maa/91.

—V—

Hamlin Transmission Corporation.—73/Maa/91.

Vona S.A.—45/Bom/91.

Hans-otto Schwarze.—112/Maa/91.

Henkel Kommandgesellschaft auf aktien.—116/Maa/91, 163/Maa/91, 170/Maa/91 &amp; 171/Maa/91.

## MADRAS

—I—

(68/Maa/91 to 175/Maa/91)

Idemitsu Petrochemical Co. Ltd.—124/Maa/91.

—A—

Idicheria D.—91/Maa/91, 92/Maa/91, 93/Maa/91, 94/Maa/91 &amp; 95/Maa/91.

A. Ahlstrom Corporation.—147/Maa/91.

Igen Inc.—167/Maa/91.

Agar Corporation Ltd.—146/Maa/91.

Ingus G.A.—126/Maa/91.

American Telephone &amp; Telegraph Company.—151/Maa/91.

—J—

Ammonia Casale S.A.—88/Maa/91.

Joseph T.—139/Maa/91 &amp; 140/Maa/91.

Atapex Corporation.—161/Maa/91, 162/Maa/91, 164/Maa/91 &amp; 165/Maa/91.

Joshua V.—133/Maa/91.

Atochem.—141/Maa/91, 159/Maa/91 &amp; 160/Maa/91.

—K—

—B—

Kabushiki Kaisha Toshiba.—75/Maa/91.

Billings R.E.—128/Maa/91.

Kabushiki Kaisha Toyota Chuo Kenkyusho.—168/Maa/91.

—C—

Knapp A.W.—118/Maa/91.

Cabot Corporation.—129/Maa/91.

Kumar K.N. (Dr.)—81/Maa/91.

Caterpillar Inc.—127/Maa/91.

—L—

Cecchinelli G.—74/Maa/91.

Ledeull D.—115/Maa/91.

Compagnie Generale Des Etablissements Michelin-Michelin &amp; CIE.—135/Maa/91.

Lillivys Societe Anonyme.—113/Maa/91.

Copolymer Rubber &amp; Chemical Corporation.—153/Maa/91.

—M—

—D—

Maschinenfabrik Rieter Ag.—86/Maa/91, 89/Maa/91 &amp; 157/Maa/91.

DRG (UK) Ltd.—105/Maa/91, 106/Maa/91 &amp; 107/Maa/91.

Methai M.M.—173/Maa/91.

Dalchi Pharmaceutical Co. Ltd.—175/Maa/91.

Mausser-Werke GmbH.—84/Maa/91 and 132/Maa/91.

Dasaprakash Private Ltd.—69/Maa/91, 70/Maa/91, 71/Maa/91, 99/Maa/91, 100/Maa/91, 101/Maa/91, 102/Maa/91, 103/Maa/91 &amp; 104/Maa/91.

Minnesota Mining and Manufacturing Company.—144/Maa/91.

Degesch GmbH.—79/Maa/91.

Mobil Oil Corporation.—76/Maa/91, 77/Maa/91 and 78/Maa/91.

Moen Incorporated.—87/Maa/91.

Dow Chemical Company, The.—114/Maa/91.

Motorola Inc.—123/Maa/91.

Du Pont-Howson Limited.—90/Maa/91 &amp; 154/Maa/91.

Murty C.K.—166/Maa/91.

Name & Application No.	Name & Application No.
—N—	DELHI
Natarajan (Raj) R. (Dr).—130/Maa/91.	(90/Del/91 to 169/Del/91)
Neethichamy C.—96/Maa/91.	—A—
Nokia-Mallefer Holding S.A.—136/Maa/91.	AEG Westinghouse Industrial Automation Corporation.—163/Del/91.
—O—	Abom J.—123/Del/91.
ONO.—83/Maa/91.	Allen-Bradley Co. Inc.—111/Del/91.
—P—	American Tourister Inc.—156/Del/91.
Palitex Project-Company GmbH.—108/Maa/91, 143/Maa/91, 150/Maa/91 & 152/Maa/91.	Arjomari Europe.—107/Del/91.
Polyene General Industries Private Ltd.—68/Maa/91.	—B—
—R—	BP Chemicals Ltd.—109/Del/91, 110/Del/91, 142/Del/91, 143/Del/91 and 144/Del/91.
RSL Logistik GmbH & Co.—119/Maa/91.	Bharat Starch & Chemicals Ltd.—152/Del/91 & 153/Del/91.
Railmaster System, Inc.—156/Maa/91.	Bultzingaloven F.V.—123/Del/91.
Raveendran R.—145/Maa/91.	—C—
Rockwell International Corporation.—148/Maa/91 & 149/Maa/91.	C.R. Bard Inc.—91/Del/91.
—S—	Colgate Palmolive Co.—127/Del/91.
SAJU (Chacko Se bastian).—131/Maa/91.	Council of Scientific & Industrial Research.—92/Del/91, 99/Del/91, 100/Del/91, 101/Del/91, 131/Del/91, 132/Del/91, 133/Del/91, 134/Del/91, 135/Del/91, 136/Del/91, 137/Del/91, 138/Del/91, 139/Del/91, 140/Del/91 & 141/Del/91.
Sandoz Ltd.—134/Maa/91.	—D—
Sappl Limited.—117/Maa/91.	Davol Inc.—96/Del/91.
Sebastain P.J.—82/Maa/91.	—E—
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Shet G.V.—120/Maa/91, 121/Maa/91, 137/Maa/91 & 138/Maa/91.	Energy Conversion Devices, Inc.—117/Del/91.
Societe des Produits Nestle S.A.—125/Maa/91 & 174/Maa/91.	ESCO Corporation.—129/Del/91.
Stamicarbon B.V.—155/Maa/91.	Etablissements Morel-Ateliers Electromecaniques De Favières.—155/Del/91.
—T—	ETI Explosives.—122/Del/91.
Tascon M.—97/Maa/91.	ETI Explosives Technologie International (Canada) Ltd.—122/Del/91.
Tharakan S.—80/Maa/91.	ETI Explosives Technologies Ltd.—122/Del/91.
Thomas C.T.—139/Maa/91 & 140/Maa/91.	Ethyl Corporation.—118/Del/91.
Thomas T.—139/Maa/91 & 140/Maa/91.	Exxon Chemical Patents, Inc.—108/Del/91 & 121/Del/91.
Tba Trading Co. Ltd.—172/Maa/91.	—G—
—U—	GEC Alsthorn S.A.—162/Del/91.
Union Oil Company of California.—169/Maa/91.	Gere S. Di Zerega.—157/Del/91.
—V—	Gopal S.C.—10/Del/91, 103/Del/91 & 104/Del/91.
Vannucci P.L.—74/Maa/91.	Guha S.K.—126/Del/91.
Viral Technologies, Inc.—122/Maa/91.	
—Z—	
Zollweger Uster Ltd.—85/Maa/91.	

## Name &amp; Application No.

—H—

Heinrich Quante Berg-Und Ingenieur-Technik GmbH. &amp; Co. Kg.—124/Del/91.

—K—

Kapoor A.—106/Del/91.

Karer R.—120/Del/91.

Klason C.—123/Del/91.

Kubat J.—123/Del/91.

Kumar A. (Major) Dr.—147/Del/91.

—L—

Lubrizol Corporation, The.—148/Del/91 &amp; 164/Del/91.

Lucet R. 160/Del/91.

Lyons B.G.—166/Del/91.

—M—

Minnesota Mining &amp; Manufacturing Co.—146/Del/91.

Motorola Inc.—94/Del/91 &amp; 95/Del/91.

—P—

PPG Industries, Inc.—154/Del/91.

Paul Wurth S.A.—128/Del/91.

Procter &amp; Gamble Co. The.—112/Del/91, 113/Del/91, 114/Del/91, 115/Del/91, 116/Del/91, 146/Del/91, 149/Del/91 &amp; 150/Del/91.

Procter &amp; Gamble Far East Inc.—116/Del/91.

—S—

Saini M.S.—125/Del/91.

Sethi S.—130/Del/91.

Shell Internationale Research Maatschappij B.V.—145/Del/91, 158/Del/91 and 159/Del/91.

Singh A.—90/Del/91.

S.L. Electrostatic Technology Inc.—163/Del/91.

Standard Oil Co. The.—97/Del/91.

—T—

Telefonaktiebolaget LM Ericason.—119/Del/91.

—U—

UOP. 98/Del/91.

Ungemach P.—160/Del/91 &amp; 161/Del/91.

Union Carbide Industrial Gases Technology Corporation.—169/Del/91.

—W—

Wahl T.R.—105/Del/91.

Warner-Lambert Co.—93/Del/91.

Whirlpool Corporation.—151/Del/91.

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

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Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्य को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप है।"

नीचे सूचीगत विनिर्देशों की सीमित संख्या में मुद्रित प्रतियाँ, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरान्त उसकी आवश्यकता पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके; (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु० है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

CLASS : 37-A, 141-D.

168911

Int. Cl. : B 01 d 21/26, B 04 b 3/00.

**A CONCENTRATOR FOR SEPARATING PARTICULATE MATERIAL OF HIGHER SPECIFIC GRAVITY.**

Applicant & Inventor : STEVEN ALEXANDER MCALISTER, OF 32778 BELLVUE CRESCENT, CLEARBROOK, BRITISH COLUMBIA, CANADA V2S 5K3.

Application No. 40/Cal/1988 filed January 18, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

**6 Claims**

A concentrator for separating particulate material of higher specific gravity from particulate material of lower specific gravity comprising :

- (a) a hollow drum having an open end and an interior surface;
- (b) means for rotatably supporting said drum on an axis;
- (c) drive means for rotating said drum about said axis; and
- (d) material supply means to deliver said particulate material into the end of said drum spaced from said open end;

wherein said interior surface of said drum beginning at said end of said drum spaced from said open end comprises in consecutive order an outwardly inclined migration zone, a retention zone which is substantially parallel to said axis of rotation and an inwardly inclined lip zone, where said hollow drum comprises an open interior providing unobstructed delivery of said particulate material to said migration zone of said interior surface and where the respective lengths of said migration, retention and lip zones and the relative degrees of inclination of said migration and lip zones are selected to provide a sufficient component of force on said particulate material and to permit said heavier particulate material to be retained in said retention zone.

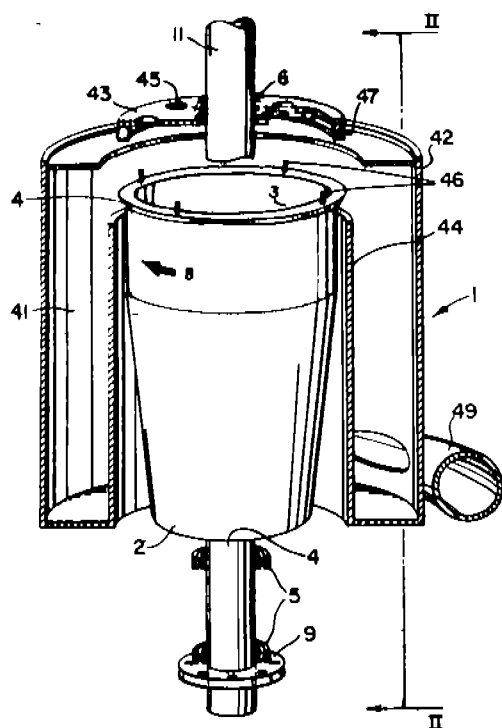


Fig. 1

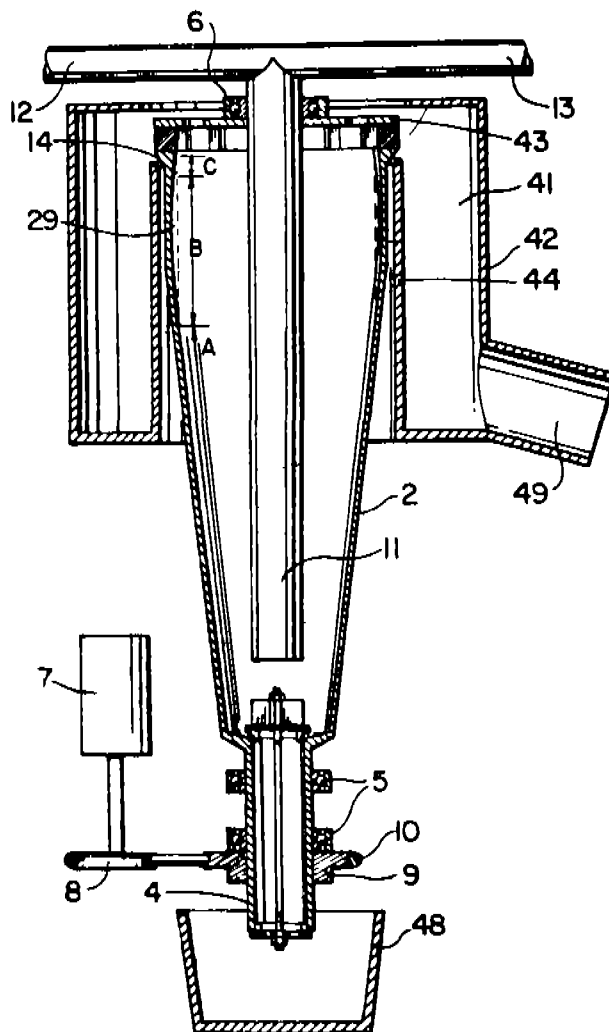


Fig. 2

Compl. Specn. 13 Pages.

Drgs. 3 Sheets.

CLASS : 69-Q.

168912

Int. Cl. : H 01 h 71/74.

**IMPROVEMENTS IN OR RELATING TO CIRCUIT INTERRUPTER APPARATUS WITH A STYLE SAVING OVERRIDE CIRCUIT.**

Applicant : WESTINGHOUSE ELECTRIC CORPORATION, OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, U.S.A.

Inventors : (1) JOSEPH JACOB MATSKO, (2) WILLIAM ELLSWORTH BEATTY, J.R., (3) RAYMOND O.D. WHITT, (4) GARY FRANCIS SALETTA.

Application No. 68/Cal/1988 filed January 28, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

**11 Claims**

A circuit interrupter apparatus operable at a selected one rating from a range of current withstanding ratings, comprising :

interrupting means disposed in a normally conducting electrical circuit and effective to interrupt current flow through said electrical circuit upon the reception of a trip signal;

conditioning means coupled to said electric circuit to condition a current value proportionate to such current flow, said conditioning means producing a conditioned signal representative of the magnitude of said current value;

operating means effective for deriving at least one operating characteristic from said conditioned signal, said operating means further effective for comparing said at least one operating characteristic to a corresponding at least one tripping parameter and generating said trip signal when said at least one operating characteristic is at least equal to said corresponding at least one tripping parameter;

signal developing means receptive of said current value, and effective to develop therefrom, an override signal;

said override signal being communicated to a first switching element over a regulating element when said override signal is below a predetermined override value, and said regulating element preventing communication of said override signal to said first switching element when said override signal exceeds said predetermined override value which thereby enables communication of an alternate trip signal to said interrupting means; and

whereby said regulating element is disposed within said circuit interrupter apparatus at a position which is removably separable from said signal developing means on one terminal by a first connector and from said switching element on its other terminal by a second connector such that said regulating element can be replaced in the event of a change in such selected one rating from such range of current withstanding ratings without effect to said developing means and said first switching element.

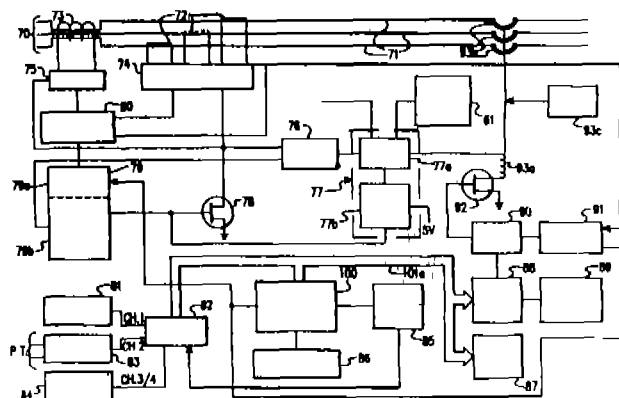


Fig. 3

Compl. Specn. 79 Pages.

Drgs. 27 Sheets.

CLASS : 32-A1.

168913

Int. Cl. : C 09 b 43/00.

A PROCESS FOR THE PREPARATION OF A WATER-SOLUBLE MONOAZO COMPOUND WHICH IS SUITABLE AS A DYE STUFF.

Applicant : HOECHST AKTIENGESellschaft, D-6230 FRANKFURT AM MAIN 80, F.R. GERMANY.

Inventors : (1) HARTMUT SPRINGER, (2) WALTER HELMLING, (3) LUDWIG SCHLAFFER, (4) WERNER HUBERT RUSS.

Application No. 115/Cal/1988 filed February 10, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 19 Claims

1. A process for the preparation of a water soluble monoazo compound which corresponds to the formula (1) of the accompanying drawings

in which :

D is a naphthyl radical which is substituted by 1, 2 or 3 sulfo groups or by one group of the formula  $Y-SO_2-$  where Y has the below-mentioned meaning, or by one such  $Y-SO_2-$  group and 1 or 2 sulfo groups, or is a radical of the formula (2a) or (2b)

in which

M and Y have the below-mentioned meanings,

m represents the number zero or 1,

R<sup>1</sup> denotes a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, an alkoxy group having 1 to 4 carbon atoms or a carboxyl group, and

R<sup>2</sup> denotes a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, an alkoxy group having 1 to 4 carbon atoms, a sulfo group, a carboxy group, an aryl radical which may be substituted, a hydroxy group, a nitro group or a halogen atom;

n represents the number zero or 1;

R is either a hydrogen atom or an optionally substituted alkyl group having 1 to 4 carbon atoms, and

R\* is either a hydrogen atom or an optionally substituted alkyl group having 1 to 4 carbon atoms,

where R and R\* may have meaning which are identical to one another or different from one another;

X is a fluorine atom or a chlorine atom;

B is a group of the formula (3a) or (3b)

in which

R<sup>3</sup> is a hydrogen atom, an optionally substituted alkyl group having 1 to 4 carbon atoms, or an optionally substituted aryl radical,

R<sup>4</sup> is a hydrogen atom, an optionally substituted alkyl group having 1 to 8 carbon atoms, a cycloalkyl group having 5 to 8 carbon atoms and optionally having 1 to 3-methyl group and/or one amino group, alkanoylamino group having 2 to 5 carbon atoms or benzoylamino group as substituents, of R<sup>4</sup> is the phenyl radical which may be substituted by 1, 2 or 3 substituents from the series comprising sulfo, carboxy, halogen, alkyl having 1 to 4 carbon atoms, alkoxy having 1 to 4 carbon atoms, nitro, a group of the formula  $-SO_2-Y'$  (in which Y' has one of the below-mentioned meanings for Y or is a  $\beta$ -hydroxyethyl group,

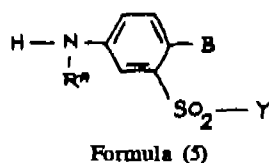
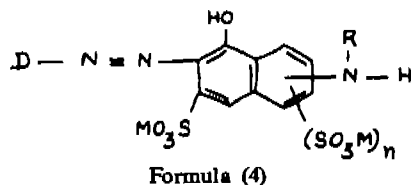
alkylamino containing an alkyl radical having 1 to 4 carbon atoms, dialkylamino containing alkyl radicals each having 1 to 4 carbon atoms, alkanoylamino having 2 to 5 carbon atoms, and benzoylamino, or is a naphthyl radical which may be substituted by 1, 2 or 3 sulfo groups and/or a group of the formula  $-\text{SO}_2-\text{Y}'$  (where  $\text{Y}'$  has the above-mentioned meaning), and

$\text{R}^3$  has one of the meanings mentioned for  $\text{R}^4$ ,  $\text{R}^5$  being identical to  $\text{R}^4$  or different from  $\text{R}^4$ , or

$\text{R}^4$  and  $\text{R}^5$ , together with the nitrogen atom and one, two or three alkylene radicals having 1 to 5 carbon atoms and, if appropriate one or two further heteroatoms, form a 5—to 8—membered heterocyclic radical;

$\text{Y}$  is a —thioethoxy, —phosphatoethyl, —chloroethyl, vinyl or —sulfoethyl group, where the  $\text{Y}$ 's may have meanings which are identical to one another or different from one another;

$\text{M}$  is a hydrogen atom or an alkali metal or the equivalent of an alkaline-earth metal; which comprises reacting a monoazo compound of the formula (4) in which  $\text{D}$ ,  $\text{M}$ ,  $\text{R}$  and  $n$  have the above mentioned meanings, and an aromatic amine of the formula (5), in which  $\text{B}$ ,  $\text{R}^*$  and  $\text{Y}$  have the above mentioned meanings, with 2, 4, 6—trichloro-*s*-triazine or 2, 4, 6—trifluoro-*s*-triazine in equivalent amounts in any desired sequence or, if desired, simultaneously, said reaction carried out at a temperature between 0 and 90°C and at a pH of between 1.5 and 7.



Compl. Specn. 48 Pages.

Drgs. 5 Sheets.

CLASS : 190-B.  
Int. Cl. : F 01 d 5/00.

168914

METHOD OF MANUFACTURING ROTATABLE PARTS OF ROTARY MACHINES.

Applicant : SIEMENS AKTIENGESellschaft, OF WITTELSBACHERPLATZ 2, D-8000, MUNCHEN 2, WEST GERMANY.

Inventors : (1) GERHARD ROETTGER, (2) ERWIN STUECKER.

Application No. 153/Cal/1988 filed February 22, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

4 Claims

Method of manufacturing rotatable parts of rotary machines having a hub bore in a hub region with a central axis, which comprises pre-turning a contour at the hub region having a shape as seen in the direction of the central axis differing from the shape of a hub contour to be produced, performing the step of pre-turning the contour by forming regions of the pre-turned contour being oversized as compared to the hub contour to be produced, and by forming at least one additional ring being oversized as compared to the hub contour to be produced heat treating at least the hub region of a rotatable part, cooling at least the hub region having the pre-turned contour with a coolant fluid after the heat-treatment to produce internal compressive strains in the hub region, and reducing the pre-turned contour after the cooling to the hub contour to be produced.

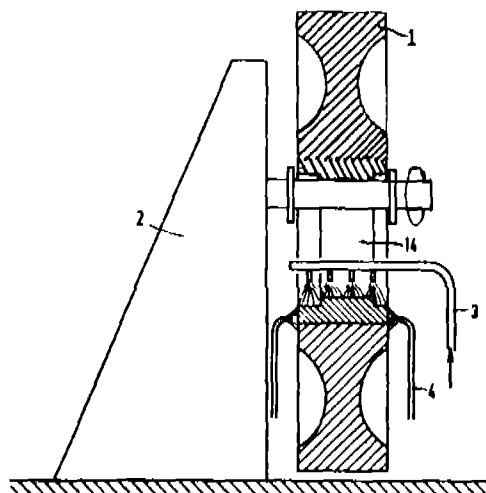


Fig. 1

Compl. Specn. 13 Pages.

Drg. 1 Sheet.

CLASS : 187-E4, E4, H.  
Int. Cl. : H 04 m 1/00.

168915

VARIABLE COLOUR DISPLAY TELEPHONE.

Applicant & Inventor : KAREL HAVEL, 15 KENSINGTON ROAD, APT. # 704, BRAMALEA, ONTARIO, CANADA M6T 3W2, CANADA.

Application No. 182/Cal/1988 filed March 02, 1988.

(Convention dated March 12, 1987; No. 531, 834; CANADA)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

A telephone device comprising :

dialing means for selectively dialing a telephone number to establish a telephone call of a selective type;

variable colour display means for visually presenting said dialed telephone number;

means for determining the type of a telephone call in accordance with the dialed telephone number; and

colour control means for controlling the colour of said variable colour display means in accordance with the type of the telephone call.

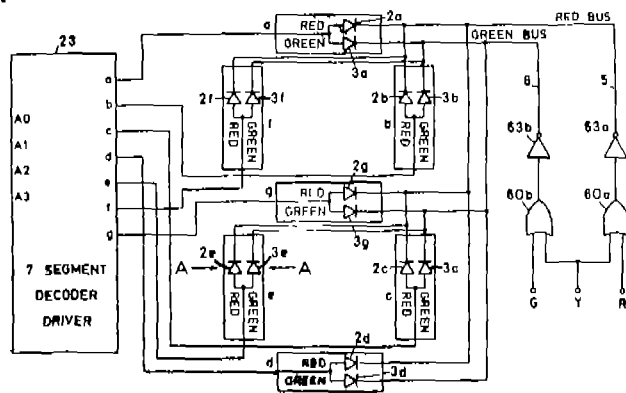


Fig. 1

Compl. Specn. 30 Pages.

Drgs. 11 Sheets.

CLASS : 39-E; 130-F & I.  
Int. Cl. : C 22 b 58/00; C 01 g 15/00.

168916

#### PROCESS FOR RECOVERY OF GALLIUM BY CHELATE RESIN.

Applicant : SUMITOMO CHEMICAL COMPANY, LIMITED,  
OF 15, KITAHAMA 5-CHOME, HIGASHI-KU, OSAKA,  
JAPAN.

Inventors : (1) YASUYUKI KATO, (2) MASAOKI MATSUDA,  
(3) KENJI OCHI.

Application No. 261/Cal/1988 filed March 29, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

#### 6 Claims

A process for recovery of gallium by contacting aqueous solution as herein described containing gallium and other impurity metals with a chelate resin characterized in that said chelate resin as herein described has a higher selective adsorptivity for gallium than for impurity metals until gallium is adsorbed on said chelate resin, and contacting said aqueous solution with said chelate resin is effected at a rate of at least 20 parts by volume/hr per part by volume of the chelate resin, at a temperature not exceeding 80°C.

Compl. Specn. 17 Pages.

Drg. NIL.

CLASS : 10-F.  
Int. Cl. : F 42b 13/00.

168917

#### IMPROVEMENTS TO PIERCING PROJECTILES.

Applicant & Inventor : SERGE LADRIERE, OF LE COTTAGE,  
27, BD DU PLAN DES ABEILLES, 06230 SAINT JEAN CAP  
FERRAT, FRANCE.

Application No. 388/Cal/1988 filed May 13, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

#### 6 Claims

Piercing projectile comprising a main projectile (1) matching the caliber of the weapon and in which is provided at least one axial bore (2) opening towards the front, an auxiliary projectile (3) housed in said bore (2), matching the caliber of said bore (2), a propulsive charge (4) being placed between the bottom of this bore (2) and said auxiliary projectile (3), a trigger device (5) to ignite the propulsive charge (4) in order to cause the auxiliary projectile (3) to be fired before or at the time of the impact of the main projectile (1) on its target, characterized by the fact that said piercing projectile is provided with at least one complementary charge (11) located in the front part of main projectile (1), said complementary charge (11) being fixed by a channel (14) placing the axial bore (2) in communication with the complementary charge (11), the firing of which being caused by the passage of the auxiliary projectile (1) in front of said channel (14).

Compl. Specn. 10 Pages.

Drg. 1 Sheet.

CLASS : 133-A.  
Int. Cl. : H 02 p 5/00.

168918

#### CROSS TIE FOR INDUCTION MOTOR DRIVE.

Applicant : GENERAL ELECTRIC COMPANY, OF 1 RIVER  
ROAD, SCHENECTADY, NEW YORK 12345, UNITED STATES  
OF AMERICA.

Inventors : (1) ROBERT WILLIAM DELMERICO, (2) PAUL  
MARTIN ESPELAGE.

Application No. 434/Cal/1988 filed May 27, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

#### 5 Claims

An alternating current motor drive comprising :

- (a) an alternating current induction motor;
- (b) an alternating current to direct current converter for providing an output voltage and current of variable magnitude to a link circuit;
- (c) control means for controlling said output current comprising:
  - (i) means responsive to an input signal representing desired motor speed to establish a control signal representing a desired output voltage of said alternating current to direct current converter, and,
  - (ii) means for limiting the magnitude of said control signal at a limited value;
- (d) a direct current to alternating current converter for converting the direct current on said link circuit to an alternating load current for application to said motor;



- (e) control means for controlling frequency of said load current comprising means responsive to the input signal representing desired motor speed for establishing an initial flux set point signal; and,
- (f) a cross tie circuit for selectively effecting a modification of said initial flux set point signal to provide a final flux set point signal for use in the control of said converter, said cross tie circuit comprising :
- means to establish a reference signal representative of a percentage of the limited value of said control signal;
  - means to combine said reference signal with said control signal to provide a difference signal when said control signal exceeds said reference signal,
  - means to modify said difference signal to provide a cross tie signal, and
  - means to combine said cross tie signal with said initial flux set point signal to provide said final flux set point signal.

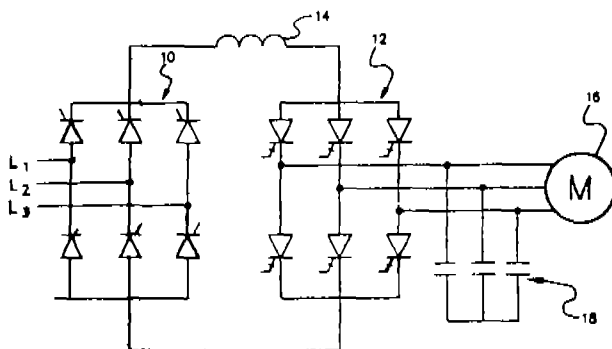


Fig. 1a

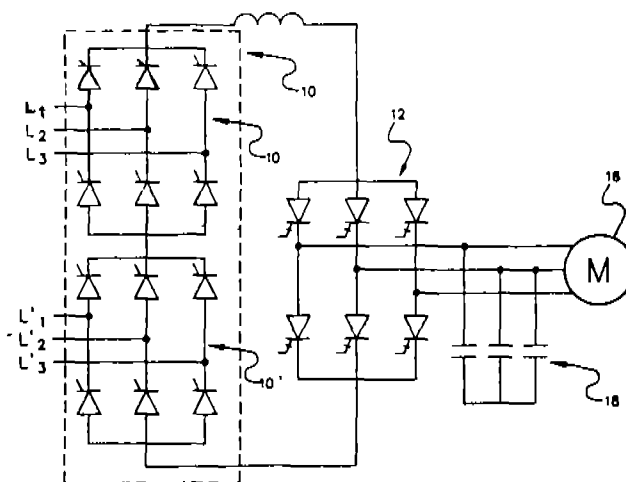


Fig. 1b

Compl. Specn. 33 Pages.

Drgs. 10 Sheets.

CLASS : 13-A, 128-G.

168919

Int. Cl. : A 61 b 19/00; B 65 d 30/00.

AN APPARATUS FOR ASEPTIC FILLING OF A CLOSABLE  
BAG OF FLEXIBLE MATERIAL.

3—G—147 GI/91

Applicant : ALFA-LAVAL FOOD & DAIRY ENGINEERING  
AB, OF 221 03 LUND 1, SWEDEN.

Inventor : KARL MARTENSSON.

Application No. 165/Cal/1989 filed February 27, 1989.

[Divisional of Appln. No. 350/Cal/1986 Ante-dated to May 05, 1986]

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 2 Claims

An apparatus for aseptic filling of a closable bag having a separate inlet member (3) with an opening for filling of the bag with material, for instance liquid, and a separate member (7) for closing of the filling opening from the inside of the bag characterized in

—that the inlet and closing members (3, 7) both have means (6, 12) adapted for engagement with an operating equipment (13—16) when the filling opening is uncovered as well as when it is closed,

—that the operating equipment (13—16) is arranged for moving at least one of said members relative to the other for uncovering or closing, respectively, of the filling opening,

—that a filling member (17) is adapted to be connected to the inlet member (3) for filling of the bag, and

—that means are arranged for sterilization of the space which is formed before and after the filling of the bag between the closing member (7) and the filling members (17) while the latter is connected to the inlet member (3).

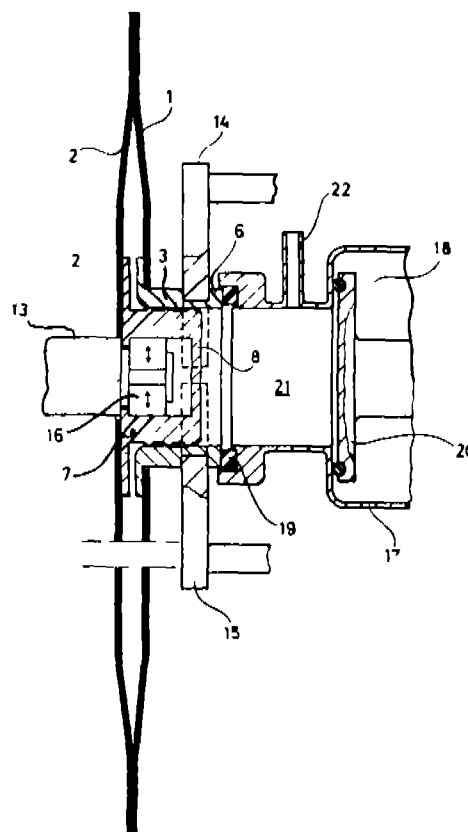
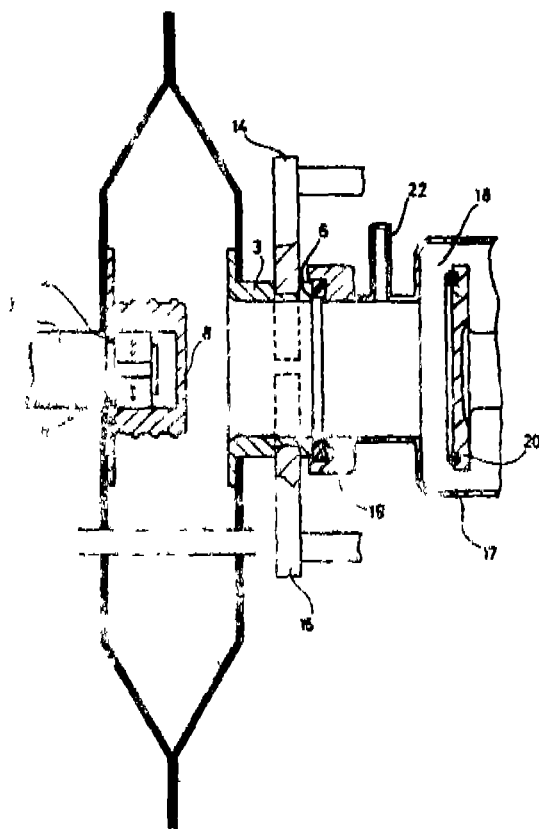


Fig. 3



Compl. Specn. 11 Pages.

Drgs. 3 Sheets.

CLASS : 29-A  
Int. Cl. G 06 f 3/00.

168920

**APPARATUS FOR READING A PLURALITY OF INPUT DATA BITS TRANSMITTED SERIALLY FROM A RESOURCE MEMORY.**

Applicant : COMMODORE-AMIGA, INC., OF 983 UNIVERSITY AVENUE, LOS GATOS, CALIFORNIA 95030, U.S.A.

Inventors : GLEEN JAY KELLER.

Application No. 830/Cal/1990 filed on 25th September, 1990.

[Divisional of Appln. No. 555/Cal/1987 Ante-dated to July 17, 1987]

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

9 Claims

Apparatus for reading a plurality of input data bits transmitted serially from a resource memory, comprising :

means for detecting an input data bit, each of the plurality of data bits being detected during a corresponding one of a plurality of receive cycles;

means for generating a number that is changed by a nominal amount in response to the presence of a clock signal to identify each of a plurality of time periods of the receive cycle, including early and late time periods;

means coupled to the number generating means for generating a carry signal in response to the generated number reaching a predetermined amount during one of the time periods during each receive cycle;

means coupled to the detecting means and the number generating means for storing a plurality of generated numbers each generated number being stored when each of a plurality of data bits is detected, to identify the time period during which each data bit is detected;

means coupled to the number storing means for generating a first frequency control signal to shorten the duration of each receive cycle at time when the plurality of stored numbers indicates a plurality of data bits was detected during early time periods of the corresponding receive cycles;

means coupled to the number storing means for generating a second frequency control signal to lengthen the duration of each receive cycle at times when the plurality of stored numbers indicates a plurality of data bits was detected during late time periods of the corresponding receive cycles;

means coupled to the number generating means and the first frequency control signal generating means for changing the nominal amount to a larger amount in response to the presence of the first frequency control signal, to shorten the duration of each receive cycle;

means coupled to the number generating means and the second frequency control signal generating means for changing the nominal amount to a smaller amount in response to the presence of the second frequency control signal, to lengthen the duration of each receive cycle; and

data buffer means coupled to the detecting means and the carry signal generating means for storing the detected data bit in response to the presence of the carry signal.

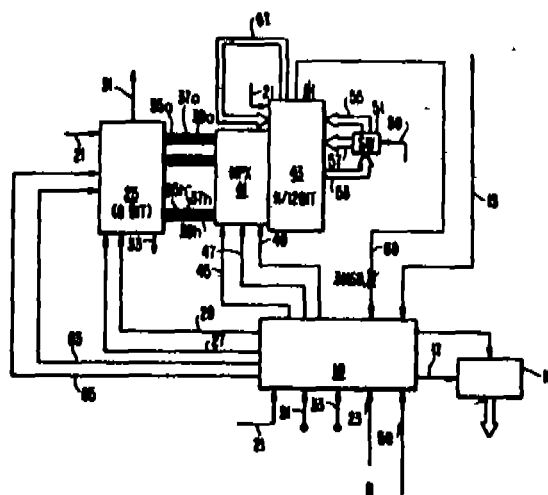


Fig. 1

Compl. Specn. 30 Pages.

Drgs. 2 Sheets.

CLASS : 32-E.

168921

Int. Cl. : C 08 I 33/26.

**A BLEND OF WATER SOLUBLE POLYMERS.**

Applicant : PHILLIPS PETROLEUM COMPANY, OF BARTLESVILLE, STATE OF OKLAHOMA, U.S.A.

Inventors : (1) BURNS LYLE DEAN, (2) SWANSON BILLY LARS.

Application No. 167/Cal/1988 filed February 26, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

8 Claims

A blend of water soluble polymers capable of forming a thickened water solution in the presence of an acid, consisting essentially of:

- (a) from 60 to 90 weight percent of a water-soluble copolymer A, wherein said copolymer A contains about 50 weight percent of at least one monomer which is acrylamide or methacrylamide and about 50 weight percent of at least one monomer which is sodium 2-acrylamido-2-methylpropane sulfonate or 2-acrylamido-2-methylpropane sulfonic acid; and
- (b) from 10 to 40 weight percent of a water-soluble copolymer B wherein said copolymer B contains about 30 weight percent of at least one monomer which is acrylamide or methacrylamide and about 70 weight percent of at least one monomer which is sodium 2-acrylamido-2-methylpropane sulfonate or 2-acrylamido-2-methylpropane sulfonic acid, the blend being optionally converted into a solution with acidic water.

Compl. Specn. 13 Pages.

Drg. NIL.

CLASS : 48-D.

168922

Int. Cl. : H 01 r 4/28.

**CUTTING/CLAMPING SLEEVE CONTACT.**

Applicant : KRONE AKTIENGESELLSCHAFT, OF BEESKOWDAMM 3—11, D-1000 BERLIN 37, WEST GERMANY.

Inventors : (1) DIETER GERKE, (2) MANFRED MULLER.

Application No. 172/Cal/1988 filed February 29, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

14 Claims

Cutting/clamping sleeve contact for contacting a cable wire laterally to the sleeve axis, in particular for cable wires in telecommunications, comprising at least one clamping slot at the periphery of the sleeve and comprising a cutting/clamping contact in the interior of the sleeve, characterized by that wall pieces (2, 3) are cut out from the wall (33) of the sleeve made of a metal material, and are bent inward into the interior of the sleeve as contact legs (6, 7) for forming the cutting/clamping contact.

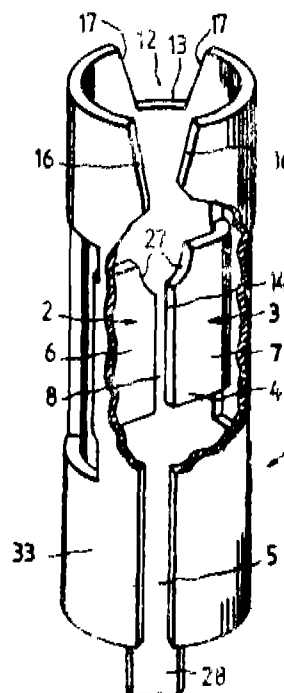


Fig. 1

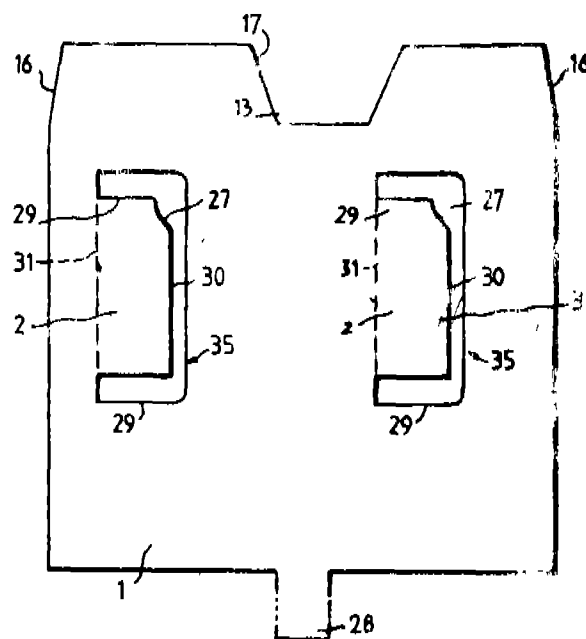


Fig. 6

Compl. Specn. 10 Pages.

Drgs. 4 Sheets.

CLASS : 80-E.

168923

Int. Cl. : B 01 d 17/02; C 07 f 1/40

**OIL-WATER SEPARATOR**

Applicant : MCTIQUE INDUSTRIES, INC., P.O. BOX 922, MITCHELL, SOUTH DAKOTA 57301, U.S.A.

Inventors : (1) MICHAEL DEAN SCHMIDT, (2) ROBERT TOWNSEND MCALIGH.

Application No. 200/Cal/1988 filed March 07, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

# 12 Claims

An oil water separator comprising :

- (a) a tank;
- (b) inlet means located at a lower portion of the tank and defining a flow path to direct an oil water mixture into the tank;
- (c) diffusion baffle means in the inlet means, the diffusion baffle having a corrugated surface;
- (d) at least one coalescing pack comprising a plurality of substantially parallel generally planar oleophilic plates, each plate having a generally polygonal shape with a corner and being oriented such that first and second sides of each plate extending from the corner form acute angles with a generally horizontal plane passing through the corner, the plate pack located within the tank above the inlet means such that the oil water mixture flows across the plates from the first side toward an opposite, third side through the plate pack between the corrugated plates causing the oil particles to separate from the water and to coalesce on the underside of the corrugation;
- (e) a plurality of substantially parallel corrugations formed on major surfaces of each plate extending generally transverse to the flow of oil water mixture across the plates such that oil particles coalescing on the underside of each plate are directed to a fourth side of each plate;
- (f) at least one means defining an oil relief channel separated from the flow of water across the plate pack and in fluid communication with the fourth sides of the plate pack to direct the separated oil into an upper portion of the tank;
- (g) a clean water outlet;
- (h) water channel means to direct water from the plate pack to the clean water outlet; and
- (i) sensing means
- (j) effluent valve systems, and
- (k) oil outlet means located in the upper portion of the tank to facilitate withdrawal of the separated oil therefrom.

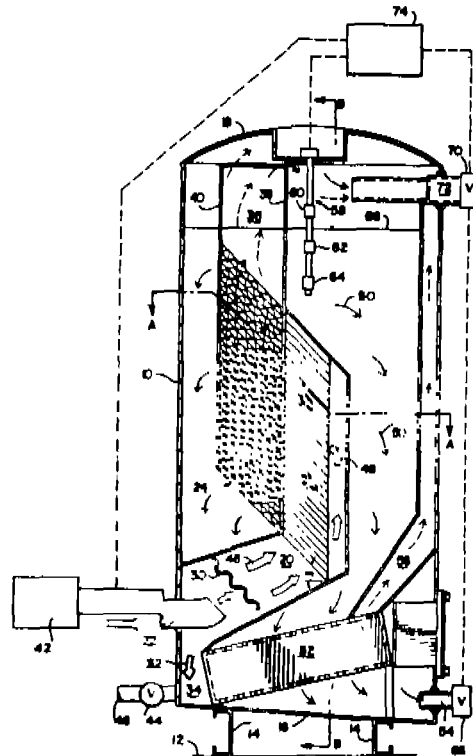


Fig. 2

Compl. Specn. 11 Pages.

Drgs. 2 Sheets.

CLASS : 175-H.  
Int. Cl. : F 02 f 3/00.

168924

PISTON FOR SLIDING IN CYLINDERS OF RECIPROCATING INTERNAL OR EXTERNAL COMBUSTION ENGINES AND COMPRESSORS.

Applicant & Inventor : JEAN FREDERIC MELCHIOR OF 126 BOULEVARD MONTPARNASSE, 75014 PARIS, FRANCE.

Application No. 230/Cal/1988 filed March 18, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

# 25 Claims

A piston for sliding in cylinders of reciprocating internal or external combustion engines and compressors, i.e. machines in which the working gas contained in the or each cylinder (2) by a transverse surface (10) of the piston (1) is at both high pressure and high temperature, preferably for reciprocating two-stroke or four-stroke internal combustion engines, which piston (1) has, within an externally

cylindrical skirt (3), a partly spherical bearing surface (4) for receiving in the manner of a ball joint a partly spherical head (5) of a connecting rod (6) wherein said piston comprises an inner cavity (7) open at an end opposed to said transverse surface (10) and laterally defined at least partly by a cylindrical bearing surface (8) having a form of revolution in that the space (12) defined inside the cavity (7) by the partly spherical head (5) of the rod (6) is filled with a viscous, pasty or plastically-deformable fluid (13) which is practically incompressible at operating temperatures and pressures of the piston (1); and in that the diameter (D) of said cylindrical bearing surface (3) is very slightly larger than the diameter (d) of the partly spherical head (5) of the rod (6) so that the operational clearance between said cylindrical bearing surface (8) and said partly spherical head (5) is small enough to prevent any migration of said fluid (13) out of said space at the operating temperatures and pressures of the piston.

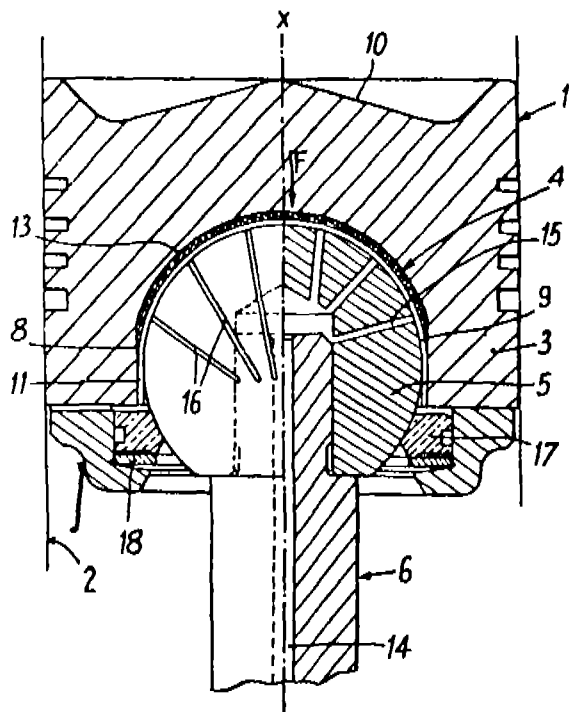


Fig. 1

Compl. Specn. 36 Pages.

Drgs. 6 Sheets.

CLASS : 14-A<sub>1</sub>, A<sub>2</sub>.  
Int. Cl. : H 01 m 2/30, 4/56.

168925

#### METHOD OF FORMING LEAD TERMINALS ON ALUMINIUM OR ALUMINIUM ALLOY CABLES.

Applicant : SOCIETE ANONYME DITE : ALUMINIUM PECHINEY, OF 23 RUE BALZAC, 75008, PARIS, FRANCE.

Inventors : (1) JACQUES LEFEBVRE, (2) ANDRE SAVIGNY, (3) BERNARD HAREL.

Application No. 278/Cal/1988 filed April 05, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 14 Claims

Method of forming lead or lead alloy terminals on cables comprising an insulative sheath and an aluminum core, in which method the appropriate length of the core is bared, a metal part is fixed to the bared core and the terminal is cast over said metal part, said metal part being compatible externally with the lead or the lead alloy forming the terminal is compatible internally with the aluminum core without any high-resistivity substance being formed.

Compl. Specn. 8 Pages.

Drgs. 2 Sheets.

CLASS : 126-C.  
Int. Cl. : G 01 r 11/00.

168926

#### SINGLE PHASE KILOWATT HOUR METER.

Applicant & Inventor: TILAK KRISHNA SAHGAL, OF 60, BALLYGUNGE CIRCULAR ROAD, CALCUTTA-700 019, WEST BENGAL, INDIA.

Application No. 357/Cal/1988 filed May 02, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

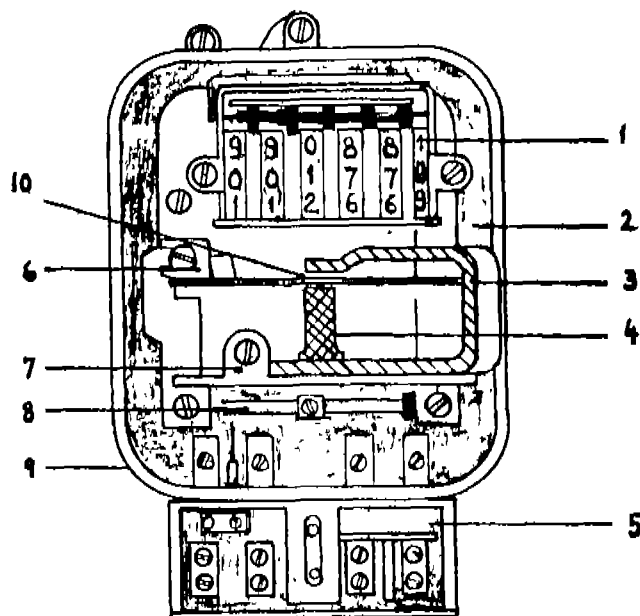
#### 7 Claims

A single phase kilowatt hour meter which is characterised in that

It is provided with six counter roller instead of the usual five to increase the meter capacity ten times

its top and bottom bearings have spring mountings to reduce friction and make the meter sensitive for recording at low in put energy

and its driving electromagnet and the permanent magnet gap is kept as large as 2.8 mm as against the usual maximum of 2.4 mm to allow free movement of the rotor disc.



**Fig. 2**

**Fig. 3**

**Fig. 4**

**Fig. 5**

CLASS : 200-D.

168927

5 Claims

Int. Cl. : E 02 f 5/00.

**AIR-BLASTING CARTRIDGE.**

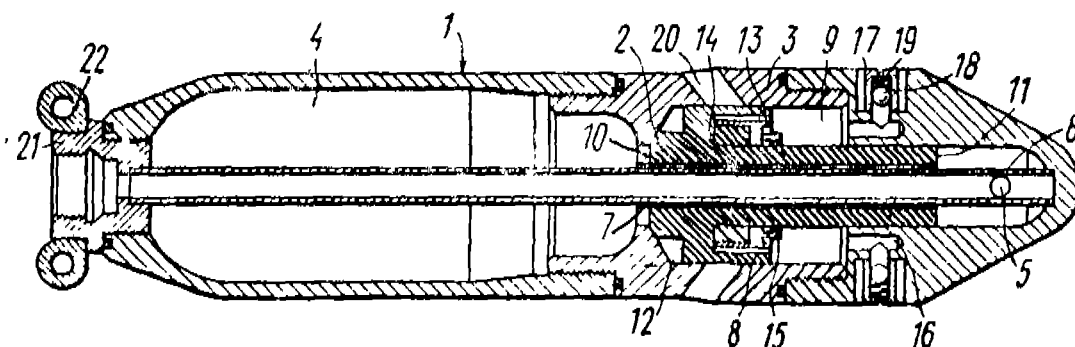
Applicant : MAKEEVSKY INZHENERNO-STROITELNY INSTITUT, OF MAKEEVKA, POSELOK DZERZHINSKOGO, USSR.

Inventors : (1) LEONID GEDALIEVICH SLEZ, (2) JURY IVANOVICH TJURIN.

Application No. 487/Cal/1988 filed June 15, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

An air-blasting cartridge, wherein its housing is subdivided, by a piston arranged lengthwise a longitudinal axis thereof, into an inlet chamber communicating with a source of compressed air through an air admission tube which runs through an axial port of said piston, and a discharge chamber communicating with the inlet chamber through an annular gap between said air admission tube and said piston and adapted to communicate with the surrounding atmosphere at the instant of its discharge; the area of the end surface of said piston that faces said discharge chamber is greater than the area of the end surface of said piston that faces said inlet chamber but is smaller than the area of the end surface of a collar on said piston that faces said discharge chamber, said collar forming, together with said housing, an additional chamber on the side facing said inlet chamber.



Compl. Specn. 10 Pages.

Drg. 1 Sheet.

CLASS : 69.

168928

Int. Cl. : H 01 h 21/00.

**A CIRCUIT-BREAKER.**

Applicant : SIEMENS AKTIENGESellschaft, OF WITTELSBACHERPLATZ 2, D-8000, MUNCHEN 2, WEST GERMANY.

Inventor : REINHARD SCHWEIGER.

Application No. 504/Cal/1988 filed June 20, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

the trip member when the circuit through the circuit-breaker is complete, the circuit-breaker further comprising a spring which acts on the second latch member at a third point so as to urge the second latch member to turn about the first axis, the second latch member in turn urging the first latch member to turn about the first axis and to contact the trip member at the latching point, a manually displaceable operating member coupled to the second latch member, a fixed contact and a movable and can be moved into and out of contact with the first contact by turning of the second latch member, the arrangement being such that on operation of the trip member, the latter moves and then the spring causes the second latch member to cause the first latch member to turn about the second axis so that the first latch member is displaced from its seat, thereby freeing the first and second latch members to be turned by the spring about the first axis so that the movable contact comes away from the fixed contact.

7 Claims

A circuit-breaker comprising a trip member, a first latch member which engages the trip member at a latching point when the trip member is in its normal operating position and the circuit through the circuit-breaker is complete, a housing for the circuit-breaker on which is a seat which is engaged by the first latch member when the trip member is in its normal operating position and the circuit through the circuit-breaker is complete, a second latch member which is mounted to be turned about a first axis and is coupled to the first latch member at a coupling point in such manner as to transmit motion to the first latch member but is not fixed to it, the first and second latch members overlapping at the coupling point, the seat and the latching point being on opposite sides of the coupling point such that the effective length of the lever arm between the seat and the coupling point is less than the effective length of the lever arm between the coupling point and the latching point, the first latch member being arranged to turn about a second axis and to be guided along an arcuate guideway, the latching point and the seat being on opposite sides of the second axis in the normal operating position of

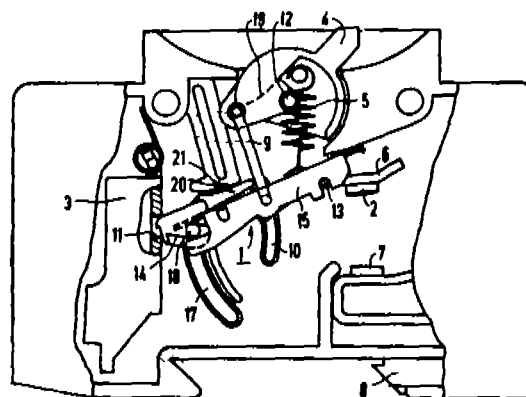


Fig. 1

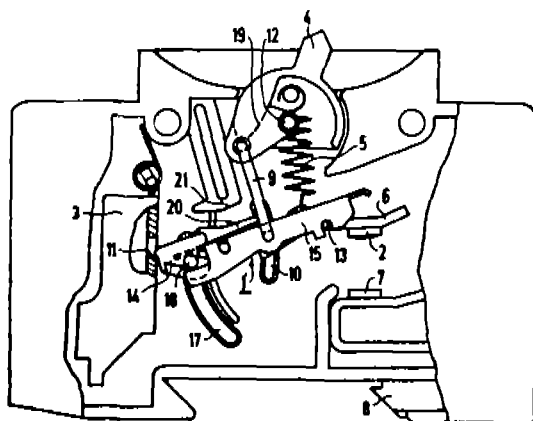


Fig. 2

Compl. Specn. 14 Pages.

Drgs. 4 Sheets.

CLASS : 98-E.

168929

Int. Cl. : F 28 f 3/00.

AN ELEMENT BASKET ASSEMBLY FOR A HEAT EXCHANGER.

Applicant : THE AIR PREHEATER COMPANY, INC., OF ANDOVER STREET, WELLSVILLE, NEW YORK, U.S.A.

Inventor : THOMAS GARY MERGLER.

Application No. 623/Cal/1988 filed July 27, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 5 Claims

An element basket assembly for a heat exchanger comprising :

- (a) a plurality of heat transfer element plates juxtaposed in a stacked array;
- (b) first and second end plates disposed at opposite ends of said stacked array of heat transfer element plates in abutting relationship therewith;
- (c) a pair of spaced upper side straps disposed along opposite sides of said stacked array of heat transfer element plates inter-connecting the upper edges of the sides of the first and second end plates;
- (d) a pair of spaced lower side straps disposed along opposite sides of said stacked array of heat transfer element plates inter-connecting the lower edges of the sides of the first and second end plates; and
- (e) at least one stiffening member disposed within said stacked array of heat transfer element plates intermediate the first and second end plates, said stiffening member extending transversely across the element basket assembly to interconnect said pair of spaced upper side straps and to interconnect said pair of spaced lower side straps.

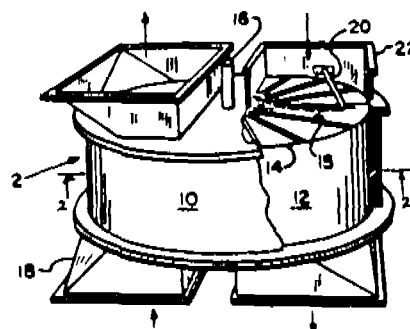


Fig. 1

Compl. Specn. 11 Pages.

Drgs. 2 Sheets.

CLASS : 107-B, G.

168930

Int. Cl. : F 02 b 15/00, 39/00.

A DEVICE FOR COMPRESSION RELEASE RETARDING OF A MULTICYLINDER FOUR CYCLE INTERNAL COMBUSTION ENGINE.

Applicant : THE JACOBS MANUFACTURING COMPANY AT 22 EAST DUDLEYTOWN ROAD, BLOOMFIELD, CONNECTICUT 06002, U.S.A.

Inventor : ZDENEK SIDONIUS MEISTRICK.

Application No. 676/Cal/88, filed on 8th August, 1988.

[Divisional of Appln. No. 398/Cal/86 ante-dated May 28, 1986].

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 2 Claims

A device for compression release retarding of a multi-cylinder four cycle internal combustion engine, each cylinder of which has an engine piston operatively connected to a crank shaft, and intake and exhaust valve means, said internal combustion engine in its normal powering mode having the pistons thereof moved in their respective cylinders through an inlet stroke, a compression stroke an expansion stroke and an exhaust stroke during each two revolutions of said crank shaft, said device comprising :

an electrical control circuit, manually operable by switches; a hydraulic circuit, adapted to be actuated by the said electrical control circuit, the exhaust valve means being operatively connected to the said hydraulic circuit; and an electronic control unit for controlling the operation of the hydraulic circuit, said electronic control unit being adapted to receive signal in the event of the engine retarder being activated and also to timing signal from a sensor, sensing the function of the engine/retarder, whereby two engine retarding events are capable of being provided during each two revolutions of the crank shaft for each engine cylinder, the arrangement being such that in the event of the device being operated, the flow of fuel is reduced to at least one cylinder of the internal combustion engine during its braking mode;



during said braking mode the powering mode movement of the exhaust valve means of said one cylinder is modified to provide two engine retarding events, one during each upstroke movement of the engine piston, and a first air intake event on downstroke movement of the engine piston following a first of the two engine retarding events; and

the intake valve means is moved in substantially its normal powering mode fashion during braking to provide a second air intake event on downstroke movement of the engine piston following a second of the two engine retarding events, said two engine retarding events and said first and second air intake events occurring during each two revolutions of the crank shaft.

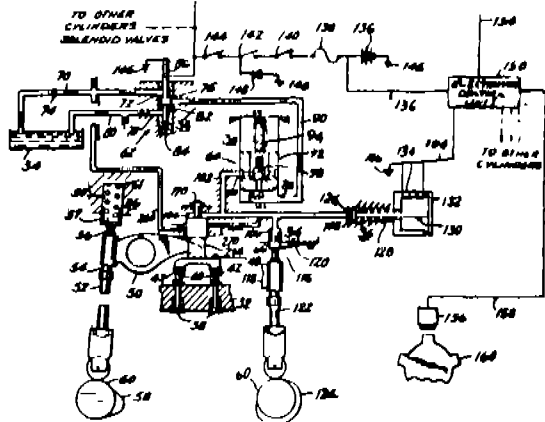


Fig. 4A

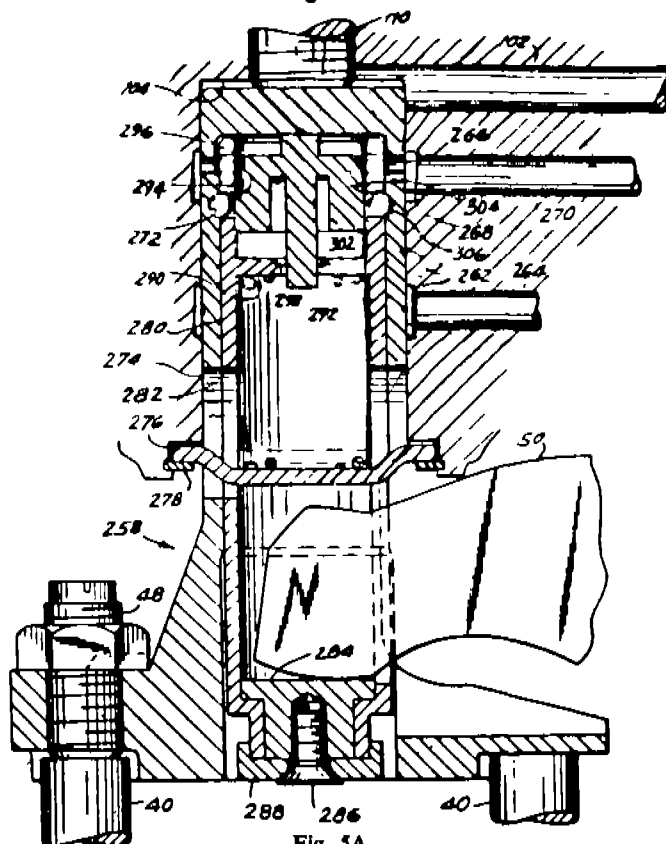


Fig. 5A

Compl. Specn. 37 Pages.

Drgs. 11 Sheets.

## REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries is the date of the registration of the design included in the entry.

Class 1. No. 162890 & 162891. Ramamoorthy Srinivasan, 15, North Mada Street, Srinagar Colony, Madras-600015, Tamil Nadu, India, Indian National. "Door interlocking device". February 5, 1991.

Class 1. No. 163047. L. V. Sham Cottage Industries, Indian Partnership firm of 2292/2, Inside Gate Hakiman, Amritsar-143001, Punjab, India. "Torch". March 19, 1991.

Class 3. No. 162759. Liberty Enterprises, Liberty House Extension, Karnal, Haryana, India, Indian Partnership Firm. "Box-cum-Carry Bag". December 13, 1990.

Class 3. No. 162766. Varun Enterprises, Vishwakarma Bldg., 2nd Floor, Central Avenue Road, Chembur, Bombay-400071, Maharashtra, India, Proprietary Firm. "Comb". December 17, 1990.

Class 3. No. 162781. Bionica, 11 Floor Municipal Complex Bldg., Palai-686575, Kerala, India. "Tapping head light". December 24, 1990.

Class 3. No. 162996. Docbel Industries, 3/17, Asaf Ali Road, New Delhi-110002, India, Indian Proprietary Firm. "Weighing Scale". March 11, 1991.

Class 3. No. 163026. L.V. Sham Cottage Industries, 2292/2, Inside Gate Hakiman, Amritsar 143001, Punjab, India, Partnership Firm. "Torch" March 15, 1991.

*Copyright extended for the second period of five years*

No. 162429 ..... Class 1.  
Nos. 156991, 156992, 156695, to 156699, 162428, 157180,  
162674 ..... Class 3.

*Copyright extended for the third period of five years*

Nos. 151098 to 151102, 162429, 151112 & 151113 ..... Class 1.  
Nos. 162428 & 162674 ..... Class 3.

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